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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,055	12/27/2000	Vilho Raisenen	442-009797-US(PAR)	5523
2512	7590	12/08/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			TON, ANTHONY T	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,055

Applicant(s)

RAISANEN, VILHO

Examiner

Anthony T Ton

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____



PHIRIN SAM
PRIMARY EXAMINER



DETAILED ACTION

Specification Objection

1. The disclosure is object to because of the following informalities:

Term “on the **bases**” in page 9 line 30 is improper.

Examiner suggests changing this term to “on the **basis**”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
4. **Claims 1, 3-11, and 13-19** are rejected under 35 U.S.C. 102(e) as being anticipated by *Schuster et al.* (US Patent No. 6,360,271) hereinafter referred to as *Schuster*.

a) **In Regarding to Claim 1:** *Schuster* disclosed a device for timing the processing of

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data packets, comprising:

a memory for storing a data packet that arrives in the device as part of a data burst (*see Fig.2: 34 and 40; and col.8 lines 17-28: a memory*),

a clock for determining the course of time (*see col.7 lines 27-31: clocks within the transmitter and receiver; and col.11 lines 1-7: the second clock signal*), and

processing means for processing the data packet that exits the memory (*see col.8 lines 17-28: a processor*),

wherein the device further comprises

calculating means for calculating a value for a play-out delay with which value only m data packets would have failed to be received of n temporally most recent data packets if the initiation of the processing of data bursts comprising the data packets had been delayed for the period of said play-out delay (*see col.4 lines 29-51: buffer processing algorithms*),

where n and m are natural numbers (*see col.15 line 64 – col.16 line 6: a 10% loss of a round-trip delay of 140 ms (hence, $n = 140$ and $m = 14$)*), and transferring means for transferring the packets from the memory to the processing means on the basis a response obtained from the clock of the reaching of said play-out delay value from the moment the data packet was received (*see col.11 lines 48-58: The receiver may further be configured to play-out the decoded media signal, for instance, sending the signal over communications link 44 to output medium 22. In this regard, the receiver may be configured to depacketize the data stream if desired, as indicated by functional block in Fig.2 (hence, transferring means)*).

b) In Regarding to Claim 3: Schuster further disclosed said data packet is the first data packet of a data burst (*see Fig.2: Packet P_0 is the first data packet of the packet stream $P_0 - P_4$*).

c) **In Regarding to Claim 4:** *Schuster* further disclosed said transferring means are arranged to transfer received data packets following the first data packet that belong to the same data burst from the memory after a delay from the moment the temporally most recent data packet was taken from the memory (see Fig.2: To which, packet stream 40 is received at the receiver 20, then the packet stream 40 is stored and arranged to become packet stream 42 in the jitter buffer 34, and the stream 42 is transferred to the depacketizer playout 46 then to the output 22).

d) **In Regarding to Claim 5:** *Schuster* further disclosed said delay is a sampling interval (see Fig.2: wherein a packet stream is sampled in an interval of 40 ms as shown at the transmitter 12).

e) **In Regarding to Claim 6:** *Schuster* further disclosed said data burst comprises real-time interactive data (see col.8 lines 43-47).

f) **In Regarding to Claim 7:** *Schuster* further disclosed the data burst comprises one of the following: packet video over IP, Voice over IP, audio/video streaming over IP (see col.4 lines 43-56; and col.6 lines 61-65).

g) **In Regarding to Claim 8:** *Schuster* further disclosed a duration of said data burst is equal to the time during which a sender transmits information uninterruptedly (see Fig.2: wherein, the duration of Packet Stream 26 (data burst) is 40 ms (from the 0 ms of the first Packet P_0 to the 40 ms of the last Packet P_4), and the duration of the Packet Stream 40 received by the Receiver 20 is also 40 ms (from the 50 ms of the first Packet P_0 to the 90 ms of the last Packet P_4) (hence, a duration of the data burst is equal to the time during which a sender transmits information uninterruptedly (no packet lost)).

h) **In Regarding to Claim 9:** *Schuster* further disclosed said data packets are received from a data network through a real-time connection to some other party of the data network (*see col.14 lines 33-51*).

i) **In Regarding to Claim 10:** *Schuster* further disclosed said device is a jitter buffer of device that makes use of real-time information (*see Fig.2: Jitter Buffer 34*).

j) **In Regarding to Claims 11 and 13-19:** these claims are rejected for the same reasons as claims 1 and 3-9, respectively because the device in claims 1 and 3-9 can be used to practice the method steps of claims 11 and 13-19.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Schuster et al.* (US Patent No. 6,360,271).

a) **In Regarding to Claim 2:** *Schuster* disclosed all aspects of this claim as set forth in claim 1; and

Schuster further disclosed the device further comprises

a maximum value determined for the play-out delay (*see col.4 lines 46-52: maximum tolerable end-to-end transmission delay; and see Fig.4: Step 60 Exceeds Threshold?*), and

Schuster failed to explicitly disclose a claimed subject matter of when the value of said play-out delay is higher than the maximum value determined for the play-out delay, the device is arranged to use the maximum value of the play-delay as the value of the play-out delay.

However, *Schuster* inherently disclosed such a claimed subject matter because in **Fig.4** at steps 60, 62 and 64, *Schuster* disclosed that when play-out delay on the first path is higher than a maximum value (*a threshold*) determined for the play-out delay, the device is arranged to use a second path to route a desired packet stream; therefore, the play-out delay is never exceeded the threshold (*the maximum value of the play-delay as the value of the play-out delay*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to implement such a claimed subject matter, as taught in **Fig.4** of *Schuster*, in order to maintain a quality of service in a communications network. The motivation for doing so would have been to optimize play-out quality in a VoIP communications network (*see col.11 lines 1-7*). Therefore, it would have been obvious to implement such a claimed subject matter, as taught in **Fig.4** of *Schuster* in the invention as specified in the claim.

j) **In Regarding to Claim 12:** this claim is rejected for the same reasons as claim 2 because the device in claim 2 can be used to practice the method steps of claim 12.

Examiner Information


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The examiner can normally be reached on M-F: 8:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ken Vanderpuye** can be reached on **571-272-3078**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by : 
Anthony T. Ton
Patent Examiner
December 03, 2004



PHIRIN SAM
PRIMARY EXAMINER